

# REMARKS

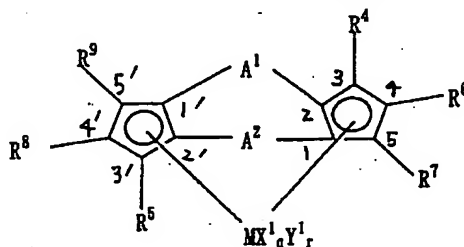
The rejection of Claims 5-7, 9 and 10 under 35 U.S.C. § 103(a) as unpatentable over U.S. 6,339,135 (Kashiwamura et al) and U.S. 5,854,165 (Yabunouchi et al), is respectfully traversed. Claim 5 no longer recites a C<sub>1</sub> to C<sub>20</sub> hydrocarbon group as a member of the R<sup>1</sup> Markush group. Neither Kashiwamura et al nor Yabunouchi et al disclose or suggest A<sup>1</sup> and A<sup>2</sup> of Claim 5. Accordingly, it is respectfully requested that the rejection be withdrawn.

The rejections of Claims 1-7 and 9-12 under 35 U.S.C. § 102 as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over, either of U.S. 6,414,090 (Minami et al) or U.S. 5,496,902 (Evertz et al), are respectfully traversed.

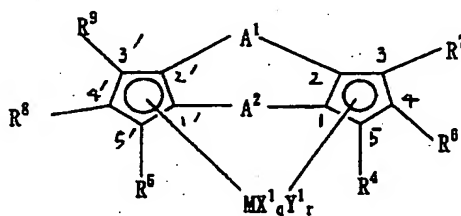
All of the present process claims require producing a high-fluidity 1-butene-based polymer in the presence of a polymerization catalyst comprising a transition metal compound having present formula (II), which may be characterized as having a (1,2')-(2,1')-substituted structure.

A (1,2')-(2,1') substituted structure is contrasted with a (1,1')-(2,2') substituted structure, graphically shown below:

(1, 2' -) (2, 1' -) substituted compound



(1, 1' -) (2, 2' -) substituted compound



Neither Minami et al nor Evertz et al disclose or suggest a (1,2')-(2,1') substituted structure, as now discussed.

Among the applicable transition metal compounds disclosed by Minami et al for use in their process, the transition metal compound of formula (I)A would appear to be the closest prior art. Compounds according to this formula, as listed therein (paragraph columns 4 and 5) have a (1,1')-(2,2') structure, and thus differ from the present transition metal compound of formula (II). Minami et al neither discloses nor suggests modifying their transition metal compound.

Evertz et al discloses a metallocene complex of general formula (I) as a catalyst in their polymerization process (column 1, lines 7 ff). However, like Minami et al, the metallocene complex of general formula (I) of Evertz et al also has a (1,1')-(2,2') structure. Evertz et al neither discloses nor suggests modifying their metallocene complex.

Thus, the present process claims are patentable over both Minami et al and Evertz et al.

With regard to product-by-process Claims 11 and 12, Applicants describe in the specification herein at page 53, lines 12-17, that the 1-butene-based resin modifier of the present invention can provide a molded article exhibiting a good softness, less stickiness and excellent compatibility with polyolefin resins, and further, the hot-melt adhesive of the present invention is excellent in thermal stability and fluidity under high temperature conditions, adhesion to low-polar substances and heat resistance at a bonded surface, clearly properties neither disclosed nor suggested by Minami et al or Evertz et al.

For all the above reasons, it is respectfully requested that the rejections over prior art be withdrawn.

All of the presently-pending claims in this application are believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Customer Number

**22850**

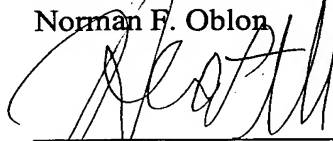
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